

What is claimed is:

1. A method of managing outdated URLs in a computing system, comprising:
examining a state stamp flag included in a URL; and
if the state stamp flag indicates that the URL is fresh, then
performing both a complementary operation and a navigational operation;
otherwise,
performing only the navigational operation.
2. The method according to claim 1, further comprising:
receiving a URL, the URL including the state stamp flag, a URL state stamp and a
session identifier that identifies a user session.
3. The method according to claim 2, further comprising:
determining whether the user session is authenticated.
4. The method according to claim 3, further comprising:
if the user session is not authenticated, then
re-authenticating the user session; and
updating a stored state stamp.
5. The method according to claim 4, further comprising:
determining whether the URL state stamp matches the stored state stamp.
6. The method according to claim 5, further comprising:
if the URL state stamp does not match the stored state stamp, then
adjusting the state stamp flag to indicate that the URL is stale;

executing the URL; and

performing the act of examining.

7. The method according to claim 6, further comprising:

if the URL state stamp matches the stored state stamp, then

updating a stored state stamp;

executing the URL; and

performing the act of examining.

8. The method according to claim 6, further comprising:

creating HTML files to send to a client to form a Web page at the client, the HTML files

including a sent URL;

incorporating the stored state stamp and a sent state stamp flag into the sent URL;

adjusting the sent state stamp flag to indicate that the URL is fresh.

9. A server in a computing system to manage outdated URLs, the server comprising:

an interface to receive a URL, the URL including a state stamp flag and a URL state stamp;

a server page in communication with the interface to examine the state stamp flag;

wherein if the state stamp flag indicates that the URL is fresh, then the server page

executes the URL by performing both a complementary operation and a navigational

operation; and wherein if the state stamp flag indicates that the URL is stale, then the

server page executes the URL by performing only the navigational operation; and

a session management engine coupled to the interface and in communication with the server page, the session management engine configured to update a stored state stamp and to compare the URL state stamp with the stored state stamp.

10. The server according to claim 9, further comprising:

a database to store the stored state stamp, the database being coupled to the interface, the server page, and the session management engine.

11. The server according to claim 9, wherein the URL further includes a session identifier that identifies a user session.

12. The server according to claim 11, wherein the session management engine determines whether the user session is authenticated, and, if the user session is not authenticated, re-authenticates the user session and updates the stored state stamp.

13. The server according to claim 12, wherein if the session management engine compares the URL state stamp with the stored state stamp and the URL state stamp does not match the stored state stamp, then the session management engine adjust the state stamp flag to indicate that the URL is stale, otherwise the session management engine updates the stored state stamp.

14. A computing system to manage outdated URLs, the computing system in communication with the Internet, comprising:

means for examining a state stamp flag included in a URL, the URL having associated complementary operations and navigational operations;

means for selectively performing the complementary operations based on the state stamp flag, wherein if the state stamp flag indicates that the URL is fresh, then less than all of the complementary operations are performed; and

means for performing a navigational operation irrespective of the state stamp flag.

15. A method of managing outdated links in a computing system, comprising:
- examining a user status of a user and a Web application status of a Web application;
- generating a state stamp based on the user status and the Web application status;
- updating the state stamp each time that the either the user status changes or the Web application status changes;
- generating a Web page, the Web page displaying a plurality of URLs;
- incorporating the updated state stamp into each URL of the plurality of URLs;
- receiving a first URL to a second Web page, the first URL selected by the user and incorporating a first state stamp, the first URL storing instructions to perform a navigational operation and an complementary operation;
- comparing the first state stamp with a most current value of the updated state stamp; and
- if the first state stamp matches the most current value of the update state stamp, then performing the navigational and the complementary operation; and
- if the updated state stamp is more recent than the first state stamp; then performing the navigational operation; and
- not performing the complementary operation.

16. A method of managing outdated links in a computing system, comprising:
- updating a state stamp based on state changes from a user and from a Web application;
- 20 incorporating the updated state stamp into a link, the updated state stamp being a most current value of the state stamp at the time that the updated state stamp is incorporated into the link; and

prior to executing a received link, the received link storing instructions to perform a navigational operation and an complementary operation:

comparing a first state stamp in the received link with a latest value of the updated state stamp, wherein if the latest value is more recent than the first state stamp, then

performing the navigational operation and not performing the complementary operation,

otherwise,

performing both the navigational operation and the complementary operation.

10 17. A method of managing outdated links in a computing system, comprising:

receiving a link from a user, the link storing instructions to perform a navigational operation and an complementary operation;

if a state stamp value stored within the link is less recent than a system state stamp value, then

performing the navigational operation and not performing the complementary operation,

otherwise,

performing both the navigational operation and the complementary operation.